DOCUMENT RESUME

ED 256 779 TM 350 175

AUTHOR Bhola, H. S.
TITLE Building a Built-in Evaluation System: A Case in Point.
PUB DATE Oct 84
NOTE 32p.; Paper presented at the joint meeting of the Evaluation Research Society and Evaluation Network (San Francisco, CA, October 11-13, 1984).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Action Research; Adult Basic Education; Adult Literacy; *Developing Nations; *Evaluation Methods; Evaluators; Formative Evaluation; Models; National Programs; *Program Evaluation; Program Improvement; *Self Evaluation (Groups); Training Methods; Workshops
IDENTIFIERS *Botswana

ABSTRACT

This paper describes a system of built-in, or internal, evaluation used within the Botswana National Literacy Program (NLP). Launched in 1981 and targeted toward illiterate adults and youth aged 10 years and older, the program aims at eradicating illiteracy in Botswana by 1986. The built-in evaluation was implemented in 1983, using program officials trained in a series of workshops as "barefoot evaluators." The practical realities of a Third World country with minimal infrastructure and scarcity of skilled manpower made classical methodological control impossible. The evaluation was therefore conceptualized as an experience creating a new culture of action within the NLP rather than as a technical experiment. Instruments served as frames for meanings rather than as yardsticks for measurement. Evaluation results have been gratifying: NLP program participation increased by 60 percent. Most collected data were usable and provided a coherent and credible program picture. Results could be utilized before formal report release. The experience of constructing this built-in evaluation system reinforces the view that such humanized methods are much more useful in Third World countries than external evaluations in the sophisticated research mode. (Author/BS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED256779

BUILDING A BUILT-IN EVALUATION SYSTEM:

A CASE IN POINT

H.S. Bhola
Professor of Education
Indiana University

W.W. Wright Education Building, #203
Third and Jordan
Bloomington, IN, 47405

(812) 335-6843

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

H. S Bhola

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

TM 850 125

Building a Built-in Evaluation System:

A Case in Point

ABSTRACT

A system of built-in evaluation was designed and installed within the National Literacy Program of the Government of Botswana that seeks to bring about universal literacy in the country by the year 1986.

The context demanded that local program officials be trained as evaluators and that the roles of local evaluators be conceptualized not as high level technicians but as "barefoot evaluators." Within the practical realities of a Third World country, with minimal infrastructures and scarcity of skilled manpower, the design and installation of the built-in evaluation system was judged using criteria in the satisficing mode. Methodological control in the classical sense was impossible. Instruments such as questionnaires and observation schedules served not as yardsticks of measurement but as frames for meanings.

Results of the first wave of program evaluation have been most gratifying. An evaluation system has indeed been built into the Botswana National Literacy Program and given the chance is likely to survive. All the District Adult Education Officers in the country have been trained as also many of the Literacy Assistants in charge of clusters of learner groups in the districts. The evaluation exercise functioned concurrently as an agent of mobilization and increased number of participants in the program by 60%.

Most of the data collected was actually usable, and upon analysis provided a picture of the program that was both coherent and credible. Most importantly, the results obtained from the evaluation exercise have already been utilized at various levels of decision making even before a formal report has been released.

The experience of building a built-in evaluation system in the Botswana National Literacy Program reinforces the view that internal built-in evaluations in the satisficing mode are much more useful that external, stand-alone -- and stand-alien -- evaluations in the sophisticated research mode. More importantly, the experience of building built-in evaluations is transferable elsewhere in the Third World. It is within reach almost everywhere!

BUILDING A BUILT-IN EVALUATION SYSTEM[1]: A CASE IN POINT[2]

An understanding is slowly but surely emerging that logical-positivist methodologies that have met great success in the physical and natural sciences are not always appropriate to human sciences; and that special approaches are needed for the study of human phenomena wherein facts and values are hard to separate (Polkinghorne, 1983:x).

Experience with program evaluations during the last two decades has led the best and the brightest of today's evaluation theorists and researchers to move away from classical models rooted in the "context of command" and toward new models grounded in the "context of accommodation" (Cronbach, 1980) which is the typical environment of education and development extension. A postpositivist era in program evaluation has certainly been inaugurated as fervent calls are made in behalf of responsive evaluation (Stake, 1975), illuminative evaluation (Parlett and Dearden, 1978), evaluation as connoisseurship (Eisner, 1979), participatory evaluation (Hall, 1978), utilization-focussed evaluation (Patton, 1978), evaluation in the naturalistic mode (Guba and Lincoln, 1981), and evaluation as history (Cronbach, 1980).

The humanization of evaluation theory and methodology has also led to evaluations <u>internal</u> to program systems and to self-evaluations by non-experts, seeking to promote praxis through reflection on action -- looking for plausible causes rather than culprits (Bhola, 1979). There is also an attempt to cover in program evaluations not only the interests

1

of donors and program administrators but also of other stakeholders thereby valuing program processes and impacts from multiple value positions.

Program evaluations by external agents continue to be demanded by outside funding agencies to meet their own special needs of program planning and their politics of resource allocation. It is not always realized that while external evaluations end up serving no more than external needs, internal evaluations can serve both internal and external needs of decision makers. There is no reason why reports of internal evaluations could not be trusted and used by funding agencies. Such reports can be supplemented by additional data where necessary. On the other hand, external evaluations as stand-alone evaluations (Cronbach, 1980) can seldom serve the purposes of internal evaluations. Program functionaries and program participants experience external evaluations as spectators. The utilization of results obtained by stand-alone external evaluations by program planners and implementers has been found to be most problematic (Struening and Brewer, 1983).

Claims of objectivity, validity and reliability made in behalf of external evaluations because these are conducted by external agents are often unwarranted. External agents may simply introduce one set of biases in place of another. They may get the numbers and miss the meanings. Reliability may be no more than a fabrication. In the technical assistance context, external evaluations are plagued by further problems. External evaluations are typically conducted by teams of evaluators sent by a donor agency from outside. Such teams of expatriates, almost as a rule, are unable to spend more than a few weeks in the host country. Almost always they have to depend upon the locals as informers, interpreters and

investigators. The world they come to study is not available to them directly. Linguistic and cultural filters are placed between them and their respondents. This has led Campbell (1979:71) to suggest that external evaluations may be lacking in "the essential qualitative knowledge of what happended."

THE CASE: THE BOTSWANA NATIONAL LITERACY PROGRAM

Botswana (formerly, the British Protectorate of Bechuanaland) became independent in 1966. It is a country of the size of France, but two-third of it is covered by the Kalahari desert sand. Bulk of the population of around one million lives along the line of rail running North and South along the Eastern border. The rest is spread all over the desert in small habitations.

Botswana is surrounded by five countries: Angola, Namibia, Zambia, Zimbabwe, and South Africa. Its politics is democratic, but its economy is greatly dependent upon South Africa.

Most important development goals of the country have been defined by the government as employment creation and rural development (Republic of Botswana, 1980). Both require heavy inputs of education and extension for implementation. The government has realized that nonformal education, and especially adult literacy, will have to play a significant role in the development process. Some education must be made available to those who have been or continue to be bypassed by the formal system of education. At the same time, print communication seems necessary in a country where face-to-face delivery of extension services may be impossible to people living in small villages and cattle-posts spread all over the country. Radio can not alone carry the whole communication burden.

After some pilot testing in 1979 and the experimental year of 1980, a National Literacy Program (NLP) was launched in June 1981 to cover all the nine districts of the country. All illiterate adults and youth ten years and older were targeted by the NLP. They were estimated to be some 20% of the relevant population, between 250,000 to 300,000 in number. Illiteracy was to be completely eradicated by 1985/86.

The NLP, after its inception in 1981, attracted quite a bit of international attention and some international funding, especially from the Swedish International Development Agency (SIDA) and the Agency for Technical Cooperation of the Federal Republic of Germany (GTZ). A mid-term evaluation of the NLP had been agreed upon to be conducted during 1983. It was in this context that the project of building a built-in evaluation system described here was implemented. The training inputs necessary for the implementation of the project came from the German Foundation for International Development, Federal Republic of Germany (DSE).

CONCEPTUALIZATION OF THE EVALUATION EXERCISE

An internal evaluation of the Botswana National Literacy Program had been anticipated in a meeting of the National Literacy Committee in 1981 before the NLP had received any international funding.[3] The concept of internal, built-in evaluation was elaborated further as part of the project described here.

Internal evaluation was not to be a matter merely of substituting an evaluation team sent by a donor agency with a team of expatriate evaluators assembled by the Government.[4] Again, internal evaluation was seen as more than an in-house evaluation conducted by full-time evaluators on the regular establishment of the government and not responsible for

program planning and program implementation decisions. Internal evaluation was defined as an evaluation of the program by the program people themselves. It would combine the implementation and evaluation roles in the same one person.

In attempting to build a built-in evaluation, the purpose was to make the total program system conscious of outputs and outcomes obtained or not obtained; sensitive to the need for program information to be able to review actions and to design alternatives; to build local capacity for obtaining the required information as and when needed; and to establish patterns of data collection, storage, retrieval and utilization that may become institutionalized in the near future. The program system was thereby to be put on a higher level of professional performance.

The preceding set of objectives required that a particular level of evaluation capacity be built within the system through training. Officials at the district level, the District Adult Education Officers (DAEO's), were targeted for such training. These DAEO's would be trained in the techniques of evaluation planning, design and implementation in a series of short evaluation workshops. They would, in turn, provide the necessary orientation to the Literacy Assistants (LA's) in charge of various clusters in each district.

From a review of the qualifications and work experiences of DAEO's as a group (two or three had college degrees, and a few had diplomas in adult education from abroad), it was clear that the DAEO's could receive and profit from training in evaluation proposed to be provided to them. They would become more than "barefoot evaluators" -- they could indeed be fitted with good enough sandles which would take them a long way!

The overall evaluation exercise would not be conducted as an

experiment (there was nothing to experiment with, to compare under control), but instead would be conceptualized as an experience. It would not be a stand-alone event, but would touch the working lives of almost everyone within the NLP, thereby creating a new culture of action. This meant that all the fifteen DAEO's and all of the 120 or more LA's in the field at that time would directly take part in the evaluation exercise. As many of the 3,000 or more Literacy Group Leaders (LGL's) as possible would be associated with the conduct of the exercise. (Every one of them later would participate in the development of the Management Information System.) The evaluation exercise was to be an experience also for the participants in the NLP and as many of the learners, dropouts, graduates and local leaders would be covered as was possible within the eight to ten weeks of data collection.

An important decision was made about data flow from the field to the center in Gaborone. The principle enunciated was: Use before Dispatch! One who collects, collates or receives data must first use it to improve the program at that level before releasing it to the level above. The LGL's were, therefore, asked to collect and collate data at the level of the learning center, in tables especially provided, and learn about their centers themselves before sending data up to the LA's at the cluster level. The LA's would collate all data at the cluster level, in tables specially designed for the purpose, and write cluster reports on the basis of available data. They would, to the extent of their jurisdiction, act upon what they had learned from their reports. Then, they would send their reports along with supporting data to the DAEO's. The DAEO's would collate all data district-wise and write district reports. They too would act on their own reports, to the extent of their responsibilities, and then send their reports to the HQ in Gaborone. There a national report will

be written and used in decision making at that level and in negotiations with other government departments and outside funding agencies.

THE METHODOLOGICAL MODEL OF EVALUATION

The methodological model of evaluation used can best be described as dialectical. It was a dialectic between the ideal and the possible, between the standard and the satisficing, between technical rationality and social processes -- a marriage between the compass and the oar. The evaluation was unabashedly multischematic and multiparadigmatic (Polkinghorne, 1983:xi), synthesizing contradictions as they appeared. Norms were projected, but approximations were accepted as long as the process kept on moving and participants did not get stuck (Schön, 1983). The sole methodological objective was to describe, as best as possible in the context, the scope and the meaning of the NLP as it was being implemented.

A rather formal matrix was imposed on the evaluation exercise: the NLP was analyzed as a system with various constituent subsystems; information needs of various subsystems were listed; outlines of a Management Information System were hammered out; an evaluation agenda relevant to the NLP at that point in time was agreed upon; evaluation studies were designed in terms of the agenda; tools and instruments needed for data collection were prepared, translated and where possible pre-tested; field work was done ; and data obtained was collated and computer-analyzed.

Within this formal matrix, there had to be tolerance for the approximation. Evaluation was being conducted, not within the context of control and command, but in the context of accommodation. The formal matrix had to have elasticity. The reality of lack of control, congruence and communication had to be faced.

The training inputs necessary for building a built-in evaluation system had to be in English. While these training inputs had been designed with meticulous care, the usefulness of this training varied from one DAEO to another, depending upon their mastery of the language. There was also the constrain of training time. Decisions in regard to the information needs of the system, evaluation agendas and the elements of an MIS had to be made by the DAEO's and accepted even if they seemed less than elegant and comprehensive to the outside trainers.

All tools and instruments had to be designed by the DAEO's individually or working in small groups. Faculty resources at the training workshops were adequate, yet there was a limit to how much quality control could be imposed and what kinds of revisions could be made. DAEO's could not always translate the instruments they had constructed, nor did they always agree on the translations made by others. Setswana is a new subject in the school system, introduced in the post-Independence period and good translators are hard to find. Checks on the quality of translation by retranslation was not always possible and pre-testing was also not always done for lack of technical resources and constrains of time.

The training of LA's as investigators had to be left to the DAEO's and was not always done systematically or well. Dependable data on the scope of the current program was not available for a sampling frame to be devised, and only general decisions could be made about who should be interviewed and where.

Data collection could not be supervised in an evaluation that was conceptualized as an experience for the whole system. Some questions in the questionnaires and instruments did not communicate and the investigators ended up using these instruments not as yardsticks,but

as frames of reference for conducting conversations with their respondents. Data was recorded in Setswana and English and in some cases was a translated from a language other than Setswana. Once available, this data had to be coded, again, back to English using themes and key words from the English language.

In a world of scarce resources of paper, printing, communication and transportation, there had to be a reflective conversation with the conditions (Schon, 1983). Things were stretched to the limit, without snapping them.

TRAINING IN ACTION

The various stages of the process of building a built-in evaluation system, involving both training and action, are presented below:

Evaluation Workshop I (November 15-26, 1982)

Workshop I was conceived basically as a training workshop. It had two main objectives: (1) to learn the process of evaluation planning by actually doing evaluation planning; and (2) to write proposals, one each by each of the participating DAEO's, for conducting evaluation studies on topics relevant to the program needs of various districts, complete with evaluation objectives, evaluation designs, and tools and instruments; and to learn the basic techniques of evaluation in the process of doing so.

Evaluation planning was taught using the systems approach. The "evaluand", the NLP, was analyzed as a system of overlapping subsystems: (i) policy and planning subsystem ; (ii) administrative and instructional delivery subsystem; (iii) technical support subsystem; (iv) social mobilization subsystem; (v) curriculum and materials development

subsystem; (vi) teaching learning subsystem; (vii) post-literacy subsystem; (viii) training subsystem; and (ix) evaluation subsystem (Bhola, 1984). An ideal-type catalog of information needs of the various subsystems was developed and made the basis for developing a situation-specific evaluation agenda for the NLP. This agenda was validated through the social process of developing a consensus among the DAEO's and the HQ staff. It could not be taken to any other constituency at any other level.

A distinction was made between the need for an MIS wherein program data routinely generated by the program could be stored for retrieval and utilization as and when appropriate; and evaluation studies conducted specially for meeting unanticipated information needs of the program. The new administrative patterns and role definitions necessitated by the built-in evaluation system were discussed as well.

In the second phase of Workshop I, participating DAEO's[6] were asked to select an information need they had already experienced in their work in the district and to design an evaluation study that would generate the information required. They were assisted in the design of their evaluation studies, in selection of indicators, sampling procedures and in the preparation of tools and instruments. Plans were made for translation and pre-testing of instruments and for field work, before the DAEO's returned to work in their districts. They would come back to attend another workshop some 15 weeks later where they would bring their data for collation and report writing.

Evaluation Workshop II (March 7-18, 1983)

The data brought to Workshop II by the returning DAEO's was

uneven both in quality and quantity. Some of the DAEO's, back in their districts, had been unable to command the resources for typing, paper, stencils and ink, printing, personnel and transportation needed for the field work phase. Almost all of the DAEO's had had to lower earlier aspirations about the amount of data they would collect, but they all came to Workshop II with some data in hand.

More importantly, they had all gone through their initiation as evaluators. They had all finalized their instruments in some form, had translated these instruments as best as they could and had administered them to samples of respondents. They had realized that respondents were not always accessible. They were frustrated by the realization that their questions were not always understood by their respondents and that they sometimes invited answers that were inappropriate or ununderstandable. They also understood the need of training their LA's if they were to be employed as investigators--something they did not follow through during the main evaluation exercise.

The trainers had known from their earlier experience of conducting evaluation training in similar settings elsewhere in Africa[7], that the processing and display of data for exploring relationships and patterns was never an easy task. Each of the DAEO's was, therefore, given a set of summary tables which could be used to answer the evaluation questions that had been originally posed. The DAEO's were then helped, individually, [illegible]ssing data they had brought to fit into the summary tables. Simple procedures of descriptive statistics were explained to those who needed to use such statistics. Workshop participants were also given guidance in report writing.

These studies were based on rather limited data collected from a single district, and sometimes from a single cluster in a district, yet the insights these studies provided were highly significant. The studies on dropouts, on reasons for regular and irregular attendance, learner needs and special

problems of non-Setswana speakers in literacy classes taught in Setswana were more or less replicated later as part of the national evaluation exercise and did indeed anticipate many of the findings of the national study.

Judged as "barefoot evaluators", the DAEO's had done a good job and the training strategy being used had survived. The participants were asked to go home and complete their individual evaluation reports and bring them for presentation to Workshop III later in May 1983.

Evaluation Workshop III (May 9-20, 1983)

Workshop III was designed to provide the transition from what had been essentially a training phase to what would primarily be an implementation phase of the built-in evaluation system.

To provide a closure to the training phase, the workshop received and discussed reports of the evaluation studies already completed by the DAEO's. What had so far been individual experiences now became part of the group experience. Most of the findings fell within the range of expectations of the DAEO's and others working on the program and thus reinforced already existing knowledge. Some findings, however, went against conventional wisdom and were hotly contested; and the studies that had produced those findings were challenged by workshop participants on the basis of methodology used, selection of samples and design of instruments.

The workshop, for most part, was focussed on the core objectives of (i) recollecting the catalog of information needs of the NLP as first discussed during Workshop I; (ii) selecting, participatively as a group, those information needs that must be given priority in the life of the NLP at its mid-point; (iii) agreeing upon the data that must become part of an MIS and upon the formats for data collection and storage; (iv) listing

urgent information needs that must be fulfilled through specially designed evaluation studies; and (v) designing such evaluation studies, complete with tools and instruments for use at the national level.

There were moments when as workshop director, the author wondered if we will come through it all. But the level of commitment of participants and workshop faculty was nothing short of amazing and the productivity of the workshop simply unbelievable. There was room for improvement in the tables designed for the MIS and many of the instruments designed for the evaluation studies could have profited from additional inputs of time and technique. But time was burning! Good enough was good enough. The barefoot evaluators would walk-- though not always in great comfort.

A Visit to the Field (August 15-26, 1983)

To ensure that things were happening as planned, the author made a field visit some 12 weeks after Workshop III.

All was not well on the ground! Getting satisfactory Setswana translations of tools and instruments had not been easy. Plans for the pre-testing of instruments fell through when the University of Botswana lecturer who had agreed to supervise the pre-testing left the country. The printing of instruments -- involving close to a 100,000 sheets of paper in all -- had strained the system to the limit. These instruments were waiting to be delivered to the various districts by truck which would take the driver more than two weeks on the road to make the full round.

Down at the level of districts, things were no better. The DAEO's had not always provided the necessary orientation to their LA's to prepare them for their role in the evaluation exercise. They had sometimes told them what to do, but not how to do it. Plans for field work were no where to be found.

Indeed, the LA's were often anxious and sometimes even hostile to the idea of the evaluation exercise. Some of them suggested that what the evaluation exercise what trying to find was already known and that in fact there was no scope for improving learner participation in the program in the midst of a drought when people were starving and had left their villages in search of food.

In response to the existing situation, the field visit got transformed into a series of 1-day workshops for LA's and their DAEO's in each of their district headquarters in the country, excepting two which were covered later. Using the data recently available from the national population census, the LA's were shown distributions of illiterates in their clusters and encouraged to recruit them into the NLP and serve their needs. The instruments to be used in the evaluation exercise were distributed to the LA's. The intentions of the various items in those instruments were discussed and some basic procedures of data collection were presented. The sampling methods to be used in data collection were also discussed.

At the end of the field visit, it was not clear how the DAEO's and LA's will respond to the challenge of evaluation now before them.[8] The situation seemed hopeful and hopeless by turns. To introduce some certainty into the situation a "fail-safe" strategy was devised. The HQ staff in Gaborone, under the leadership of the Literacy Coordinator, would conduct an evaluation-within-an-evaluation. As the national evaluation exercise was going on, they would work with a small national sample controlled from the HQ in Gaborone. It would be assured that data on this small sample would be collected and become available for analysis. If all else failed, they would have at least a stand-alone evaluation to fall back upon.

The Effort Bore Fruit

Following the field visit by the author, the Literacy Coordinator and his colleague at the HQ in Gaborone were out in the field most of the time during the data collection phase, going from district to district and from cluster to cluster. This may have turned things around. The field visit earlier during August 15-26, 1983 may have shaken things up a bit as well.

Whatever the causes, the consequences were most gratifying. During the 10 to 12 weeks period before mid-December 1983, 17,000 instruments had been completed and delivered: 7,000 dealing with learning needs of participants; 2,000 dealing with the special needs of non-Setswana speakers; 1,600 on motivations of regular attenders; 1,150 dealing with those who had dropped out of the program; 3,000 listing uses to which literacy had been put by the new literates; and 1,500 village profiles describing what resources were available at the community level that could be used in providing services to the rural people.

Samples were in flux. Various items in the evaluation instruments were found ambiguous and therefore unusable. The instruments in the hands of many LGL's and LA's became frames of reference for conversations with respondents rather than instruments in the classical sense. Yet, there was lot of counting for the delineation of the scope of the program and lot of questioning in search of the meanings of the program. The evaluation exercise also became an instrument of mobilization for recruiting participants to the NLP.

Seeing the big surge of data rolling in, the HQ in Gaborone decided to buy a microcomputer for electronic data processing. To beat deadlines for report writing imposed by higher level decision makers, data was collected from the DAEO's, and sometimes from LA's, before they had had

the chance to process data at their levels and to write their reports as originally planned. Thus, the initial plans for data flow and information utilization were abandoned. The conceptualization of evaluation as experience was compromised somewhat because the product of evaluation (the report) was separated from the process of evaluation.

Evaluation Workshop IV (December 11-17, 1983)

The December 1983 workshop had initially been planned as a workshop for finalizing district level reports and for sharing the findings. The DAEO's were to write their reports using the same one standardized format to enable comparison and cumulation of results for the purposes of a national report. Now that there was to be electronic processing of data, and most data was already at the HQ in the process of being coded, the program of the workshop had to be changed to fit new realities. The DAEO's spent their time developing "dummies" for their district reports, completing portions dealing with the ecological, economic, social and developmental context of their districts as well as in recording the human aspect of the evaluation exercise as they experienced it.

The workshop also provided an opportunity for an evaluation of the to total project from November 1982 to December 1983 in both of the aspects of training and action.

The Aftermath

An outside technician was brought in from abroad to help in the electronic data processing. Data was coded with the help of students from the University of Botswana. It may be recalled, that the evaluation instruments had not initially been designed for computer analysis. Coding schemes had to be imposed on the data after the fact. This was not a simple task. The task was further complicated by the fact that the foreign technician was denied direct access to data because of the language

barrier. He had to depend on local coders and judge the quality of data indirectly from the questions these coders happened to raise.

A final report has been written. Since foreign donors have tied possibilities of further assistance with the findings of the evaluation, the government is understandably cautious. The report is going through a process of approval before being released.

RESULTS OF THE EVALUATION EXERCISE

Looking back at the project from the perspective of some eight months (at the time of writing), the following questions should be asked: Did the internal built-in evaluation project as planned and implemented achieve its objectives? Are the results of the evaluation study trustworthy? Is the built-in evaluation system as established likely to last and become institutionalized? Are the results obtained worth the time and effort put into the project? What were the incidental returns on the project, if any?

An Evaluation was Completed. On the basis of an analysis of project documentation and informal interviews with DAEO's and LA's[9], it is possible to assert that the evaluation was completed and was successful in regard to the most important criteria of all: The current understanding of those working with the Botswana NLP about the program is an "improvement over previous understanding" (Polkinghorne, 1983:3). Both the scope and meaning of the program are clearly understood.

As already indicated, some 17,000 questionnaires and interview schedules were completed as part of the evaluation exercise. The evaluation counted 28,800 learners enrolled in the program, ranging in age from 6 to 94, 31% males and 69% females. Some 65,000 learners had been covered during the life of the program which has graduated some 20,000 literates.

This data may not satisfy the classicist interested in inferential uses of data but has provided a goldmine of data for suggestive uses in developing and modifying the program both in the long and the short run. While there may be a few discordant notes here and there, the overall coherence of the data is not jeopardized. It makes lot of sense.

The Meaning of the Program. Beyond numbers, there was considerable "qualitative knowing" as was evidenced in the cluster reports written by LA's and informal reporting by DAEO's at the December 1983 workshop. Program officials at the various levels of the program discovered that motivations were not spontaneous and that mobilization is necessary to promote recruitment. They developed a real feeling for the disadvantages of illiteracy and how literacy might be changing patterns of leadership in local communities.

They discovered that some of those they had been labeling as dropouts were really completers. These learners had left because the learning centers did not offer them much anymore. On the other hand, some learners did not want to leave. These centers were fulfilling their special social needs. It was discovered that literacy classes in Botswana do not just last 12 weeks during the months of September to December but that some of these are groups that last the year round.

The evaluation also discovered primary schools within literacy classes. In remote areas of Botswana where primary education had not reached, the literacy class acquired a dual meaning: it was both a literacy class and a primary school.

Since the data and these many insights had personalized meanings for the LGI's, LA's and DAEO's, the evaluation results were utilized in making program decisions even before any formal report came out.

Are the Results Trustworthy? As has been indicated earlier, the criteria of objectivity, validity and reliability in the classical sense do not apply. The criteria of coherence, credibility, confirmability, fittingness and auditability do (Cronbach, 1980; Guba and Lincoln, 1981). The findings of the evaluation study meet both the truth test and the utility test (Weiss and Bucuvalas, 1980). The data collected and the insights garnered are in conformity with expectations of scholars and practitioners of literacy. Thus the truth test is met. The results also meet the utility test because they are action oriented, did challenge the status quo and have already moved the program in a positive direction.

The Government of Botswana, ministry of Education newsletter, Thuto, in a recent issue concluded:"We ought perhaps to mention that the evaluation has been a very valuable source of information. As a result, we have much more information about the workings of the programme and if it becomes necessary to change it in certain ways, we can confidently take decisions that are in line with the findings of the evaluation.... The programme is already being modified as suggested by the evaluation."

Will the Built-in Evaluation System Last? Conditions for the institutionalization of the built-in evaluation system have been met. The Government is not only favorable but infact claims ownership of the idea of a built-in evaluation. The series of four evaluation workshops has provided training to all the DAEO's in charge of the districts. Many of the LA's have acquired useful evaluation experience.

An MIS is already in place. While maintaining continuity with the information collection procedures previously in force, it has strengthened and rationalized the system to make it more comprehensive, less repetitive, and usable for decision making at all the various levels of the system.

The NLP system has also acquired experience in evaluation having completed a full cycle of evaluation planning, evaluation design, construction of instruments, data collection and analysis. It can muster resources from within to conduct a similar cycle on a new set of evaluation questions. Outside help, if at all needed, will be minimal.

An Informal Cost-Utility Analysis. Was the evaluation exercise worth the time and effort and other resources put into its implementation? The answer has to be a resounding "Yes". If the costs of training inputs by DSE and the expenditures on electronic processing of data (which was helpful but not crucial to the evaluation exercise)[10] are separated, we have an evaluation conducted on a shoestring budget. The whole evaluation exercise was conducted within the normal budget of the Department of Nonformal Education of the Government of Botswana. In view of the collective evaluation experience it provided to the department, there could not have been a better bargain around.

Incidental Returns on the Evaluation Exercise. The incidental returns on the evaluation exercise have been many and more keep on emerging. First and foremost, the evaluation exercise led to an impressive social mobilization in behalf of the program. In many cases, the evaluation provided the first opportunity for DAEO's and LA's for a personal encounter with learners in the villages and cattle-posts. As a result, participation went from 18,000 to some 28,800. Institutional mobilization also resulted. The NLP was able to establish networks with other government departments of education and extension for providing integrated services to adult learners at the field level.

Planning and evaluation are two sides of the same coin. Evaluation planning is the other side of program planning. In learning to describe the literacy program as a system in design terms for the purposes of evaluation,

the DAEO's developed useful insights in the planning process per se.

The DAEO's,after the evaluation exercise, are writing their routine monthly and quarterly reports with new insights. The reports are no more merely descriptive but have become quite analytical. For the first time, analyses at the learning group level and the cluster level have appeared in these periodical reports.

The morale of those working within the NLP has improved. Many LGL's, LA's and most DAEO's have owned the evaluation exercise and make references to it both in conversations and writing. There is an awareness of the need for professionalization in adult literacy, planning and evaluation. Some LA's have joined diploma and certificate courses in nonformal education and adult literacy under the department of correspondence education of the University of Botswana.

There is some fallout on other department of the Ministry of Education. The Correspondence Education Department of the Ministry is anxious to train their officers in evaluation in the same mode preparing them to apply those skills to course evaluation and learner evaluation. There is also interest in curriculum evaluation and one of the recent workshops for teachers engaged in curriculum evaluation used the project handbook, Evaluating Development Training Programs (Bhola, 1982).

Finally, there is now available a model of how to build built-in evaluation systems within literacy and other development programs in the Third World.

LESSONS FOR ELSEWHERE

There are some useful lessons in the description of this project for planners and organizers of literacy campaigns, programs and projects elsewhere in the Third World:

1. Systems of <u>internal</u> evaluation integrated with the process of program planning and implementation can improve the effectiveness of literacy campaigns, programs and projects. Such evaluations, on the one hand, professionalize the system, and,on the other hand,mobilize both institutions and learner participation.

2. The concept of "barefoot evaluator" is realistic ; and the system of built-in evaluation system as described above is replicable in most, if not all, Third World countries working on literacy campaigns, programs or projects.

3. The Action Training Model -- encompassing a series of workshops to provide training to program officials in evaluation techniques tied directly to the act of conducting an evaluation -- is workable and should be tested in other settings.

4. Finally, the lesson must be learned that experience is a great teacher. Lessons learned from the above experience of building a built-in evaluation system must now be put to work. More attention will have to be paid to design of instruments, their pre-testing and use. Field investigators will have to be better trained for data collection. There will have to be better field organization and better scheduling of data collection.

Next time around we must tolerate only a different set of errors! [11]

NOTES AND REFERENCES

NOTES

1. The choice and presentation of facts and the views expressed in this paper are the sole responsibility of the author and do not in any way represent or commit any government, institution or individual who may have collaborated with project here described in any way and at any stage of the projets's pianning or implementation.

2. The case in point is the Botswana National Literacy Program which is the responsibility of the Department of Nonformal Education, Ministry of Education, Republic of Botswana.

The program is receiving assistance from a variety of international donors, among them, the German Agency for Technical Cooperation (GTZ),Eschborn, FRG. GTZ also sent a German expert to Botswana to work as the Literacy Coordinator for the National Literacy Program.

During 1982-83, the author was retained by GTZ to provide backup technical support to the National Literacy Program (NLP) in various aspects of planning, training, evaluation and networking. Grateful thanks are due to Dr. Wolfgang Küper, Dr. Herbert Bergmann and Ms. Inge Eichner of GTZ for the opportunity so provided.

The training inputs were made by the German Foundation for International Development (DSE), Bonn, FRG. Thanks are due to Dr. Josef Müller of DSE for inviting the author to direct the whole series of workshops and for the trust placed in the author.

The built-in evaluation system described here was not built in a day nor was it built by any single person. The project described here covered a period of eighteen months during 1982-83. Those directly and significantly involved in the design and implementation of the project were: Dr. Josef Müller of DSE; Dr. Volkhard Hundsdörfer, GTZ-sponsored Literacy Coordinator in

the Department of Nonformal Education, Ministry of Education, Gaborone, Botswana; Dr. Ulla Kann, SIDA-sponsored Planning Officer in the Ministry of Education; Government of Botswana Officers in the Ministry of Education, and aspecially those in the Department of Nonformal Education; the District Adult Education Officers (DAEO's) posted in the districts; Literacy Assistants (LA's) in charge of clusters of learning centers;and Learning Group Leaders (LGL's) who work with adult learners in the field.

In the conduct of the four training workshops for DAEO's, my esteemed colleague and dear friend, Dr. Josef Müller played a most significant part. He was solely responsible for the planning and all organizational details of the workshops. Though not so stated officially, he co-designed and co-directed all the four workshops with the author.

The following agreed to serve as faculty members at the various workshops and gave generously of their time and expertise, often at considerable personal sacrifice: Dr. Lars Mählck, International Institute for Educational Planning, Paris; Dr. Ash Hartwell, Unesco Education Planning Adviser, Maseru, Lesotho; Dr. Peter Higgs, Unesco Specialist in Literacy, Lilongwe, Malawi, Dr. Volkhard Hundsdörfer, Literacy Coordinator, Gaborone, Botswana; and Dr. Josef Müller of DSE in the November 1982 workshop; Ms. Elvyn J. Dube, Institute of Adult Education, University of Botswana, Gaborone; Dr. Linda Ziegahn, USAID Researcher, Lesotho Distance Teaching Center, Maseru, Lesotho; Dr. Volkhard Hundsdörfer, Gaborone; and Dr. Josef Müller in the March 1983 workshop; Ms. Elvyn Dube; Dr. Volkhard Hundsdörfer and Dr. Josef Müller in the May 1983 workshop; and Dr. Volkhard Hundsdörfer and Dr. Josef Müller in the December 1983 workshop.

Dr. Volkhard Hundsdörfer as Literacy Coordinator in the Department of Nonformal Education, Ministry of Education was responsible for all local arrangements in connection with the series of training workshops ; and was the officer in charge of the implementation of the evaluation

in all its aspects.

All those whose work is acknowledged above . . share the credit for whatever was achieved in this poineering effort of building a built-in evaluation system in a national-scale literacy program. I must, however, take all the blame for the failure to anticipate problems and for errors of judgment.

3. Credit for this decision must go to Edwin Townsend-Coles, at that time the Chief Education Officer in charge of the newly founded Department of Nonformal Education and his colleagues in the Ministry.

4. The internal built-in evaluation was planned and installed in the Botswana National Literacy Program by agents external to Botswana. The training of local officials in evaluation techniques was also handled by outside consultants under the aegis of DSE. The important point to remember,however, is that both the planning of the evaluation exercise and the training in evaluation techniques were organized participatively and all significant decisions involved were under the control of local officials.

5. The systems approach used in evaluation planning, again, was by no means new to the project. Dr. Ulla Kann in her paper, "How Can We Succeed?:A Self-Evaluation of the National Literacy Programme in Botswana," presented to the Project Development Workshop under the International Institute for Educational Planning,Research and Training Project on Evaluation and Monitoring of Educational Reform Programs in Africa, Moshi, Tanzania, March 29 to April 6, 1982 had used the systems approach in delineating the evaluation needs of the Botswana National Literacy Program.

6. Evaluation Workshop I (November 15-26, 1982) was organized in collaboration with the International Institute for Educational Planning to serve concurrently the needs of the Institute's project: Research and

Training Project on Evaluation and Monitoring of Educational Reform Programs in Africa. Teams of four evaluators each came to join the workshop from Lesotho and Malawi. The March 1983 workshop was also attended by teams from Lesotho and Malawi. The May 1983 workshop was attended by the Malawi team but not by the team from Lesotho. The December 1983 workshop was attended only by the national staff of the Botswana National Literacy Program.

7. The author in association with Dr. Josef Müller, and under the aegis of the DSE, during 1979-82, had organized a series of evaluation workshops for the training of trainers of development workers using an Action Training Model (ATM). See H.S. Bhola, Action Training Model (ATM)--An Innovative Approach to Training Literacy Workers. Notes and Comments #128. Unit for Co-Operation with UNICEF and WFP, Unesco, Paris, March 1983.

8. A mission report was written at the end of the field visit. This mission report was used to make some important decisions in anticipation of the results of the evaluation that would be completed only in December 1983. This led to serious misunderstandings among various stakeholders.

9. The author was in Botswana, again, during August 13-24, 1984; and had the opportunity of administering questionnaires dealing with the usefulness of the evaluation exercise and the effectiveness of training for the evaluation exercise. While the sample was small -- about half of the DAEO's in the country and no more than half a dozen LA's out of a possible 125 -- there were some useful insights that became available.

10. This is not to disount in any way the most competent contribution of Dr. Rainer Hampel who came from Germany to help the Literacy Coordinator in the electronic processing of data and gave so willingly of his time and effort.

11. This paper was presented to The 1984 Joint Meeting of Evaluation Research Society and Evaluation Network held in San Francisco, California, October 11-13, 1984. The assistance of Joginder K. Bhola in the writing of this paper is gratefully acknowledged.

REFERENCES

BHOLA, H.S. (1979) Evaluating Functional Literacy. Amersham, U.K.: Hulton Educational Publications.

BHOLA, H.S. (1982) Evaluating Development Training Programs. Bonn, FRG: German Foundation for International Development.

BHOLA, H.S. (1984) Planning and Organization of Literacy Campaigns, Programs and Projects. Bonn, FRG: German Foundation for International Development.

CAMPBELL, D.T. (1979) "Assessing the impact of planned social change." Evaluation and Program Planning, 2:67-90.

CRONBACH, L.J. and ASSOCIATES (1980) Toward Reform of Program Evaluation. San Francisco: Jossey-Bass.

DAVIS, G.B. (1974) Management Information Systems: Conceptual Foundations, Structure and Development. New York: McGraw-Hill.

EISNER, E.W. (1979) The Educational Imagination. New York: Macmillan.

GUBA, E.G. and LINCOLN, Y.S. (1981) Effective Evaluation: Improving the Usefulness of Evaluation Results through Responsive and Naturalistic Approaches. San Francisco: Jossey-Bass.

HALL, B.L. (1978) Creating Knowledge: Breaking the Monopoly: Research Methods, Participation and Development. Toronto: Participatory Research Group.

Ministry of Finance and Development Planning, Republic of Botswana (1980) National Development Plan: 1979-85. Gaborone, Botswana: Government Printer.

PARLETT, M. and DEARDEN, G. [Eds.] (1978) Introduction to Illuminative Evaluation. Beverley Hills: Sage.

PATTON, M.Q. (1978) Utilization-Focussed Evaluation. Beverley Hills: Sage.

POLKINGHORNE, D. (1983) Methodology for the Human Sciences: Systems of Inquiry. Albany: State University of New York Press.

SCHÖN, D.A. (1983) The Reflective Practitioner. New York: Basic Books.

STAKE, R.E. [Ed.] (1975) Evaluating the Arts in Education: A Responsive Approach. Columbus: Merrill.

STRUENING, E.L. and BREWER, M.B. (1983) The University Edition of the Handbook of Evaluation Research. Beverley Hills: Sage.

UNESCO and UNDP (1976) The Experimental World Literacy Programme. Paris:Unesco Press.

WEISS, C.H. and BUCUVALAS, M.J. (1980)"Truth tests and utility tests: Decision-makers frames of reference for social science research." American Sociological Review 45:302-313.